



RE: TMDL for Chesapeake(Doc ID EPA-R03-0W-2010-0736-0001)

I would like to submit comments on why the TMDL Cap Load Allocations need to be revised.

1. The Bay Model does not have the accuracy necessary to determine the loads. Because of the many assumptions that are used to generate numbers the model's output is only good within a range of accuracy. It has never been tested for accuracy (determination of a confidence interval for the model). For example, the model predicted there were 300 cows in Livingston County. There are none.
2. I personally pointed out an error in one assumption (nitrogen spread on hay- 200 pounds per acre reduced to 80 based on an analysis of 13,000 acres of hayland in NY) that resulted in the load for NY changing from 15.9 m pounds delivered to 10.6.
3. The same number is still being used for WV without confirmation that it is correct.
4. Furthermore, because of extremely poor description of that land use (the land use is called "hay with nutrients" when in fact it is hay that is cut regardless of nutrient input and we were not given the definition until after the model was "locked down") the actual N spread is 46 pounds per acre. The Model is locked down so we are still required to reduce the 80 pound load that does not exist. As there are hundreds of variables there can be other assumptions that too might not be accurate.
5. A USGS analysis of N and P levels shows that at present NY water levels of N and P are below what the Bay needs to meet the TMDL; in other words if all the states had the same water quality as NY the Bay would meet its allocation. This was also confirmed by an EPA Bay Modeler who answered "yes" when I asked him if the Bay would meet standards if the water quality of the Bay. was the same as that measured at Towanda, PA, the CBP official site that measures NY (and a small portion of PA) was the same as the
6. Water quality of all the States will have higher N and P levels AFTER the TMDL is met by all states than the Water Quality of NY's water is at present.
7. NY loses about 60% of its N along the way after it leaves the edge of stream. In the model as the water becomes cleaner (less nutrients) more of the nutrients "make it" to the Bay. This means that as more BMPs are implemented you get less reductions. The concept that cleaner water allows more nutrients to pass through the system is completely opposite to any scientific logic as biological activity would utilize more not less of nutrients as they become less. The CBP has never provided any scientific documentation for this quirk in the model. The only response was the efficacy ratings were developed by running the model backwards.
8. Up to Dec 2009 the CBP edict was that those states that benefit the most would do the most work. In early 2010 this changed where all states have been given the same reduction percents.
9. NY is the only state to have its population and agricultural operations decrease and

increased its forest cover from 1985 through 2010. As the TMDL is based on the status of states as of 2009, NY is being punished for its reductions while all the other states were able to increase their N and P loads for all of those years and are starting at a much higher baseline. The TMDL should be based on 1985 baseline or whenever the Court Order was given that provided for the original voluntary approach. As the Court said "clean up by 2010 or get a TMDL", then that is the date the TMDL should be based on.

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